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ABSTRACT

Are children's same-sex affiliations due to genetically sex-linked behavioral tendencies or are they a result of power and privilege differentials in the larger society that discourage girls from engaging in cross-sex interaction? Sex cleavages in naturally occurring toddler peer groups were investigated by examining playmate preferences and differential initiations and responses within activity contexts and to friends. Three types of initiations and their responses were examined during the free play of 46 toddler-age children in the three Los Angeles day care centers. The three nonspecific friendly initiations, and agonistic initiations. The findings replicate the results of earlier studies suggesting that toddler-age children prefer same-sex playmates. Boys were more likely to ignore or refuse girls' initiations when the initiations took the form of specific requests to play a game rather than a more general approach. These findings support the hypothesis that sex cleavages within very young peer groups are based on differential socialization experiences of boys and girls rather than on sex-linked behavior tendencies. (Author/DR)

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Peer Preferences in Toddlerhood:

Influences of Friendship and Activity Context

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Thanks to the staff and children at the day-care centers who welcomed our observations. Reprint requests should be addressed to Carollee Howes, Graduate School of Education, University of California, Los Angeles, CA 90024

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Running head: SAME-SEX PEER PREFERENCES

Abstract

Sex cleavages in naturally occuring toddler peer groups were investigated by examining playmate preferences and differential initiations and responses within activity contexts and to friends. Three types of initiations (to play a game, friendly, and agonistic) and their responses were examined during the free play of 46 toddler age children in day-care centers. The children preferred same-sex play mates and this preference was strongest in the oldest girls. Boys were most likely to ignore or refuse girls' initiations when the initiations took the form of specific requests to play a game rather than a more general approach and when the initiations occurred within motor activities. Although friendships also tended to be of the same sex, if a child had same- and opposite-sex friends they were less likely to differentially initiate and respond to these friends on the basis of sex.

Same-Sex Peer Preferences in Toddlerhood: Influences of Friendship and Activity Context

Children's preferences for same-sex peers is a well documented sex difference in children's social behavior (Hartup, 1983). Recent studies in naturally occuring toddler peer groups suggest that sex cleavages in peer groups may occur in children under three years old (Howes, Rubenstein, & Eldredge, 1984; La Freniere, Strayer, & Gauthier, 1984). While the studies are in agreement regarding the age at which sex cleavages begin, the authors, of these studies provide alternative explanations for the developmental change. For example, La Freniere et al. (1984) reports that same-sex affiliative preferences in girls preceeded same sex affiliative preferences in boys. The authors suggest that early sex cleavages may occur because of sex-linked maturation and behavioral tendencies.

However, observational studies of toddler initiations and responses to peers of the same and opposite sex suggest that patterns of interaction between boys and girls may discourage girls from engaging in cross sex interaction (Fagot & Hagan, 1985; Jacklin & Maccoby, 1978; Howes et al., 1984). Boys are reported to be less responsive than girls to verbal and physical prohibitions and requests initiated by girls (Fagot & Hagan, 1985; Jacklin & Maccoby, 1978). Furthermore, there is some evidence that such differential responding may instigate sex

cleavages in the peer group. In the first data collection period of a year-long longitudinal study of a stable toddler peer group, boys were reported to initiate fewer social overtures to girls than to boys and to terminate cross-sex interaction more often than girls; but by mid-year both girls and boys were differentially initiating and terminating social interactions. Howes et al., 1984 speculate that power and privilege differentials in the wider society provide a basis for socialization practices and cognitions that lead to the exclusion of girls from boys' playgroups. The current study was designed to examine the discrepancies between these two sets of studies. Do same-sex affiliations occur for both sexes because of genetically sex-linked behavioral tendencies or do girls form same sex affiliations in response to their exclusion from male playgroups? This question was investigated by examning the activity contexts of toddler same- and cross-sex peer interactions.

If sex cleavages in toddler peer groups are based on sex-linked behavioral tendencies then we would expect children to engage with same sex peers across activity contexts. Boys would play with boys and girls with girls whether the activity was riding trikes or painting. In contrast, if sex cleavages are based on socialization or cognitions which permit boys to exclude girls from playgroups, then we expect an interaction between activity context and cross sex social interaction. That is, the

probability of a boy's response to a girl's overture would be different if the activity was block building versus doll playing. If the boy perceived that the block building was for boys and doll playing for girls, then the boy would be less likely to respond positively to a girl's invitation to play when she made it in the block corner.

Huston (1985) in reviewing recent literature on the development of sex typing suggests that sex cleavages in the peer group are related to sex-typed play activities. Sex differences in play activities and play styles have been reported for toddler age children (Block, 1983; DiPietro, 1981; Pitcher & Schultz, 1984). If boys and girls are involved in different activities, there may be simply fewer opportunities for cross-sex peer interaction. However, fewer opportunities for interaction in itself does not predict differential responses to cross-sex overtures.

A second purpose of the current study was to examine the relative saliency of sex and friendship in the peer interaction of toddlers. Friendship relationships within peer groups are known to regulate access to play (Corsaro, 1981). A child may refuse or accept an invitation to play because of the friendship relationship between the two children rather than because of the sex of the partner. This is particularly important for toddlers because a child's limited knowledge of his or her own gender

identity may cause the child to focus on friendship status rather than the sex of the peer. Fagot (1983) has suggested that gender recognition precedes the emergence of same-sex play.

Friendships, as conceptualized in the current study, imply more than simple affiliations. The definition of friendship adopted for the study is that used by Howes (1983). According to this definition a friendship is a reciprocated dyadic relationship that must include mutual preference, mutual enjoyment, and the ability to engage in skillful interaction. In contrast La Freniere et al. (1984) defined affiliation by the frequency of affiliative acts (approach, signal, contact, and directed orientation).

The content of the initiations and responses used by the toddlers was judged to be of particular importance in this study. For example, it is important to know wether the response to a girl's invitation to play a game is to join the game or to shout "no way." According to some coding schemes both responses might be coded as a verbal reply. On the other hand, the coding of the content of social behavior can lead to a proliferation of categories. Therefore only three meaningful categories were selected for examination: initiations to play a game, nonspecific friendly initiations, and agonistic initiations. Games were selected because they represent skillful and coordinated interaction and because they may reflect sex-typed

behavior. In order to play a game two children must communicate both their mutual knowledge of the game and their willingness to engage with each other. The literature on sex differences in play activities suggests that boys and girls may play different games (Hartup, 1983). If so, cross-sex invitations to play a game may be less successful than same-sex invitations because one partner does not understand the game. Alternatively, some studies suggest that girls actively avoid interaction with boys in order to avoid rough play (Hartup, 1983); therefore, girls may be unwilling to engage in games with boys and thus refuse their invitations to play.

Friendly and agonistic approaches were selected in order to examine whether cross-sex overtures are responded to on the basis of the content of the initiation or on the basis of the sex of the initiator. In other words, if girls do avoid interaction with boys, do they avoid all interactions or only those interactions with agonistic initiations?

Method

Subjects

Forty-six toddlers (23 girls) between the ages of 16 and 33 months (mean age = 24.5 months) participated in the study. The sample was heterogeneous with respect to ethnic and racial backgrounds, family structure, and SES.

The sample included all of the toddlers enrolled in three community-based day-care centers. The children attended the centers daily for 6 to 8 hours a day. They were divided into groups of 14 to 16 children representing the entire age range of the study. The children had been in the same peer groups a minimum of 6 and a maximum of 14 months (M=9m.) at the time of observation. The day care centers were characterized by unstructured curricula and adult child ratios of 1:3.5.

Although the children were observed in peer groups that spanned a year-and-a-half age range, the children were divided into two age groups for purposes of data analysis. Group I contained 23 children (12 girls) who were between 16 and 24 months of age at the beginning of data collection. Group II consisted of 23 children (11 girls) who were between 25 and 33 months of age at the beginning of data collection.

Procedure

The children were observed during free play periods in their day-care center. Observations on a child began when the child's name appeared on a randomized list of children in the groups and when the child was in peer contact. Peer contact was defined as being within 3 feet of a peer and engaged in at least parallel activity with mutual awareness (Level 2 of the Peer Play Scale, Howes, 1980). Observations continued for five minutes and then the observers moved on to the next child on the list. The

observers iterated the list of children until fifteen initiations of each type (game, friendly and agonistic) had been gathered for each child. Observers spent an average of six weeks in each classroom. Each child was observed for an average of 3.62 hours (range 1.5 to 4.25 hours) over three to six weeks (M = 4 weeks). The length of time needed to observe each child was more dependent on absences due to illness than to individual rates of initiations.

Observers recorded behaviors on checklists divided into 30-second continuous intervals. The activity context and the identity of the peer partner was recorded for each interval. If one of the targeted initiations occurred within the interval, the type of initiation, its object, and the response were recorded.

Observers were four graduate students who had received extensive training in naturalistic observational methods. Inter-observer reliability was obtained prior to data collection in the day care centers on 30 children. Observer agreement ([number of agreements]/[number of agreements + disagreements + omissions]) ranged from .91 to .95 (median .93) on initiation, response to initiation, and activity context. Agreement on the identity of the partner, and object of the initiation was 1.00. Inter-observer reliability was reestablished to a 90% criteria on behavior codes at two-week intervals throughout the four months of the study.

Identification of friends. At the end of data collection, teachers and observers were asked to identify friend pairs. Friends were defined as two children who prefer to play together, who enjoy playing together, and who play skillfully together. A list of all possible pairs in the group was provided. Raters were asked to put a check beside those pairs who were friends. Thus friendships were based on raters perceptions rather than on recorded interaction rates. Observers and teachers agreed on 98% of the friend pairs. Only teacher-identified friends were used in the analyses.

Measures

Initiations and responses.

Game invitation initiations were defined as verbal or nonverbal request (e.g., chase, tug arm, throw ball to, offer cup, point, beckon) to join in a game. Games were defined as "the mutual involvement of two partners and the repeated enactment of related game roles in a turn-alternation pattern" (Ross, 1982, p. 509). Friendly initiations were defined as offering an object out of a game context, positive touching of, or smiling at the partner. Agonistic initiations were defined as taking an object or physical aggression. Responses to initiations are defined in Table 1. Because of the low frequencies of alternative responses

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Insert Table 1 about here

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only those responses coded as joining an invited game, friendly responses to friendly initiation and active responses to agonistic initiation were used in the present analysis.

Activity. All activities observed were grouped into three activity contexts. Motor, as manipulative/expressive, and dramatic play. Motor activities included running, jumping, riding wheel toys, large block play, and climbing. Manipulative/ expressive activities included puzzles, small animals or cars, small block play, sand, paint, and water. Dramatic play included wearing firefighter hats, play in the housekeeping corner, Superman and Wonder Woman.

Data Analysis

Two different types of data analysis were used in the current study. Preference for same sex playmates, defined as either peer contact or initiations to peers, was analyzed according to a procedure devised by Goldman (1981). In this procedure, availability quotions are compared to observed behavior on a child-by-child basis. The availability quotions were based on child care attendance records and reflected the exact number of potential playmates of each sex available during each observation. The availability quotions served as the expected values were compared to observed behavior. The Z scores which resulted from these comparisons indicated whether or not the child preferred same sex peers significantly more or less than

would have been expected by chance. The numbers of children who preferred same-sex peers at levels significantly greater than chance were then examined for associations with age and sex.

Responses to initiations and the frequency of initiations within each activity context were examined using multivariate analysis of variance with repeated measures. The main effects examined in these analyses were sex of initiator, age of the initiator, and the repeated factor of sex of partner. The interaction of sex of initiator with sex of partner was also examined.

Results and Discussion

Sex Cleavages in the Peer Group

Preferences for same-sex playmates was examined to determine whether or not the current study replicated the findings of La Freniere et al. (1984). The largest corpus of data available, the total number of 30 second intervals recorded for each child regardless of whether or not the interval contained a targeted initiation, was used in the analysis. There was a mean of 434 (range = 180 to 510) intervals per child. The percentage of intervals in which a child was in peer contact (within 3 feet and engaged in at least parallel activity with mutual awareness) with same- and opposite-sex playmates was calculated for each child. These percentages were compared with availability quotions using the procedure devised by Goldman (1981) and described above.

Table 2 presents the number and percentage of children within each age and sex group who prefered same verus opposite sex peers or who had no preference. Forty-seven percent of the children

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Insert Table 2 about here

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preferred same sex playmates. Associations between playmate preference and sex and age were examined by chi-squares. There were no associations with age or sex across the total group; however, in the oldest group of children girls were more likely than boys to prefer same-sex playmates (Fisher Exact Test = .05). These findings provide a replication of La Freniere et al. (1984) in that toddler age children tend to prefer same-sex playmates and that girls who had passed their second birthdays were most likely to prefer same-sex playmates.

Differential Patterns of Interaction

Initiations

Differential patterns of interaction between same- and cross-sex peer partners were then examined to determine if the findings of the current study replicated those of previous investigators (Fagot & Hagan, 1985, Jacklin & Maccoby, 1978, Howes et al., 1984). The percentage of initiations within each category and directed to same- and opposite-sex peers was compared to availability quotions as described above. Table 3 presents the

number and percentage of children within each age and sex group who initiated more often to same- versus opposite-sex peers or who had no preference. Fifty-four percent of the children preferred

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Insert Table 3 about here

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same-sex peers for game initiations, 50% for friendly initiation and 50% for agonistic initiations. Associations between initiation preferences and sex and age were examined by chi-squares. Older children were more likely than younger children to prefer same-sex peers for game initiations (χ^2 (1) = 4.27, p = .05). Boys were more likely than girls to prefer same-sex peers for agonistic initiations (χ^2 (1) = 4.27, p = .05). The findings replicate those of Howes et al. (1984) that by mid-year in a stable peer group, toddler age children prefer to initiate to same sex peers. With the more complex initiation, games, this preference intensified in the older children. Perhaps same sex pairs were better able to coordinate their games. In addition, boys' preference for agonistic initiations to same-sex peers may be associated with the greater involvement of young boys in rough and tumble play (DiPietro, 1981).

Responses

Designated responses to initiations of each type were examined using a repeated measures multivariate analysis of

variance as described above. Significant multivariate main effects were found for sex of initiator ($F(3,35) = 4.94$, $p<.01$) and sex of partner ($F(3,35) = 2.71$, $p.05$); but not for age ($F(3,35) = 2.21$, ns). Significant interaction effects were found for sex of initiator by sex of partner ($F(3,35) = 3.20$, $p<.05$) but not for age interactions. The frequency of responses by sex of initiator and partner and corresponding univariate F values are presented in Table 4. Tukey tests of comparison indicated that both boy and girl partners were more likely to respond in an

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Insert Table 4 about here

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agonistic fashion when the initiator was a boy than when the initiator was a girl. These results are consistant with those of Fagot and Hagan (1985) and Jacklin and Maccoby (1978) which suggest that boys are less responsive than girls to assertive acts by girls. Tukey tests of comparison also indicated that boy partners were less likely to respond positively to the game invitations of boys than to those of girls. These results add content to the findings of Howes et al. (1984) by suggesting that boys are more likely than girls to specifically reject cross sex overtures to play rather than the more diffuse friendly approaches.

Activity Context

Preference for activity

Unlike previous research linking play activity to sex cleavages in the peer group (e.g., Eisenberg, Tryon & Cameron, 1984), the activity categories selected in the current study were not selected to represent sex-role stereotyped play. However, in a more general fashion motor activities are often associated with boys and dramatic play activities with girls. Therefore, sex differences in activity preferences were examined. The large corpus of data analyzed for playmate preference was also analyzed for activity context preference by using a two-way analysis of variance to compare the number of 30-second intervals each child spent in each of the three activity contexts. The main effects in this analysis were sex of child and activity context. There was a significant main effect for activity context ($F(2,43) = 9.91$, $p<.01$) and a significant interaction between sex and activity context ($F(2,43) = 4.73$, $p<.01$). Tukey tests of comparison indicated that boys spent more time in motor activity than girls, that girls spent more time in manipulative expressive activity than boys, and that children of both sexes spent more time in motor activity than in manipulative expressive, and more time in manipulative expressive activity than in dramatic play. Therefore, in the current study, there appeared to be a sex-stereotyped preference for motor activity in boys but not for dramatic play in girls.

Preference for playmate within activity

Although the children selected activities in part on the basis of their sex children of both sexes were engaged in all activity contexts. The next step in the analysis was to examine same-sex playmate preference within activity context. That is, did boys not only prefer to be engaged in motor activity but also prefer to engage with boy playmates within motor activities? Same-sex playmate preference within activity context was examined by comparing the proportion of 30-second intervals with peer contact with same- or opposite-sex peers within each activity context for each child. These proportions were compared with availability quotions based on the time spent by each sex in each activity modified by attendance records using the procedure devised by Goldman (1981) and described above. Table 5 presents

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Insert Table 5 about here

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the number and percentage of children of each sex and age group who preferred same-sex playmates significantly more often than would have been expected by chance. Twenty-eight percent of the children preferred same-sex play mates in motor activities, 43% in manipulative and expressive activities, and 15% in dramatic play activities. Associations between playmate preference and age and sex were examined by chi-squares. Girls more often than

boys preferred to play with same-sex peers within dramatic play activities ($\chi^2(1) = 8.27$, $p = .01$). Boys also preferred to play with girls rather than boys in dramatic play (Fisher Exact Test $p = .005$), and there was a nonsignificant tendency for girls to prefer to play with boys rather than girls in motor activities ($\chi^2(1) = 2.81$, $p = .10$).

Initiations and responses within activity

The final step in the examination of the inter-relationships between activity contexts and peer group sex cleavages was to examine differential patterns of interaction within activity contexts. Initiations were collapsed across initiation type (game, friendly, agonistic), because the intersection of activity type and initiation type produced low frequency and widely unequal cells. Both initiations and responses were examined by repeated measure multivariate analyses of variance as described above. There was a single main effect for sex in initiations ($F(3,105) = 4.19$, $p<.05$). Univariate F($F(1,35) = 4.40$, $p<.05$), and Tukey tests indicate that boys made more initiations than girls within motor activities.

There was a significant sex-of-initiator by sex-of-partner interaction for responses ($F(3,108) = 2.85$, $p<.05$). Means, standard deviations, and univariate F values for frequencies of responses to initiations by sex of initiator and partner within activity contexts are presented in Table 6. Tukey tests indicate

Insert Table 6 about here

that within motor activities boys were more likely to respond positively to initiation from boys rather than from girls.

These findings for activity and playmate preference within activity context and for differential patterns of initiations and response support Huston's (1985) hypothesis of an inter-relationship between play activity and peer group sex cleavages. In summary, boys more often than girls preferred to engage in motor activity, to initiate to playmates within motor activities and to respond to other boys within motor activities. The tempo of boys' play or socialization experiences may promote these preferences. For example, girls may have attempted to initiate motor activity games that fail to appeal to the boys because of a slower pace or cross-sex-stereotyped content (e.g., walking the babies versus racing bikes).

However, within dramatic play the boys preferred to play with girls (see Table 5). Girls may--again because of experience, socialization, or biological propensities--devise more exciting games within dramatic play than do boys. This type of play appears to attract the boys and reverses the more general exclusion of girls from playgroups which appears in the data when activity contexts were collapsed.

Friendship

The primary purpose of the following analysis is to investigate the hypothesis that friendship is a more salient category than sex in obtaining access to playgroups. This hypothesis was first investigated by examining sex cleavages in friendship selection, and then by examining the patterns of initiations and responses to same and opposite sex friends.

Preference for same and opposite sex friends was examined by comparing for each child the observed proportion of same sex friends with the proportion of children of each sex in the peer group following the procedure devised by Goldman (1981) and described above. Table 7 presents the number and percentage of

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Insert Table 7 about here

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children by sex and age who preferred same sex friendships significantly greater than expected by chance. Forty-six percent of the children preferred same-sex friends. Preference for same-sex friends was compared to preference for same-sex playmates using the numbers in Table 7 as the observed values, and numbers from Table 2 as the expected values, in a chi-square analysis. The children were as likely to select same-sex friends as they were to select same-sex playmates ($\chi^2(1) = .08$, ns).

Differential patterns of initiations and responses to friends were examined using only the 24 children who had same- and opposite-sex friendships. The proportion of initiations to friends of the same-sex was compared on a child-by-child basis to the proportion of friends of each sex using the procedure devised by Goldman (1981) and described above. The number and percent of children within each age and sex group who initiated to same-sex friends more often than would have been expected by chance is presented in Table 8. Thirty-three percent of the children

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Insert Table 8 about here

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prefered to invite same-sex friends to play games, 25% to initiate friendly approaches to same-sex friends and 20% agonistic approaches to same-sex friends. Preference for initiating to same-sex friends was compared to preference for initiating to partners of same-sex in general using the numbers in Table 8 as the observed values and numbers from Table 3 as the expected values in a chi-square analysis. Fewer children initiated game ($\chi^2(1) = 4.20$, $p = .05$), friendly ($\chi^2(1) = 4.17$, $p = .05$), and agonistic ($\chi^2(1) = 8.17$, $p = .01$), initiations to same-sex friends than to same-sex peers in general. That is, when children who had same- and cross-sex friendships initiated to their friends they were less likely than children who were

initiating to playmates, in general, to differentiate by sex of the partner.

Responses to the initiations of same- and opposite-sex friends were compared using a repeated measure multivariate analysis of variance as described above. There were no significant main effects or interactions indicating that the children in this study did not differentially respond to children of the same and opposite sex if the children were friends.

These findings partially support the hypothesis that friendship is a more salient category for toddler age children's access to playgroups than is sex of the partner. Although friendships were not different than playmates in terms of selection by sex, slightly more than half of the children in the study had friendships of both sexes. More importantly, the children in the current study were less likely to differentially initiate and respond to children of the same and opposite sex if the children were friends. Therefore, in the current study a girl who extended an invitation to play to a boy who was a friend was more likely to have had an experience of cross-sex play than if she extended the invitation to a boy with whom she did not have a friendship relationship. For the boy receiving the invitation to play friendship took precedence over sex in accepting the invitation.

Conclusions

The current study was successful in replicating the findings of previous investigators (Howes, et al. 1984; La Freniere, et al, 1984) who found that sex cleavages in naturally occuring peer groups may occur in children under three years old. The current study also replicated previously reported patterns of differentiated initiations and responses to same- and cross-sex peers (Fagot & Hagan, 1985; Jacklin & Maccoby, 1978; Howes et al. 1984). The current study extended these prior studies by suggesting that boys are most likely to ignore or refuse girls' initations when the initiations take the form of specific requests to play a game rather than a more general approach and when the initiations occur within motor activities. These findings support the hypothesis that sex cleavages within very young peer groups are based on differential socialization experiences of boys and girls (Block, 1983) rather than on sex-linked behavioral tendencies.

The hypothesis that friendship is a more salient category for toddler age children than sex was partially supported by the current study. This finding has implicatons for current educational practice. Efforts to challenge sex cleavages in preschool classrooms have tended to focus on changing the patterns of toy or activity use by boys and girls. For example, boys are encouraged to use the housekeeping corner and girls the

blocks (Pitcher & Schultz, 1983). These efforts have generally been unsuccessful (Serbin, Tonick & Sternglanz, 1977). The findings of the current study suggest that an alternative route to discouraging sex cleavages might be to foster cross-sex friendships, at least when the children are toddlers. This, however, assumes that sex cleavages in the peer group are to be discouraged. Recent research on preschool children suggests that children with same-sex friendships may be more socially skilled than those children who seek cross-sex friendships (Maccoby & Jacklin, 1985). Therefore, the effects of sex cleavages within playgroups requires further study.

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Table 1

Responses to Initiations

Initiation and responses	Definition	Mean	SD	Range
Game				
join	Taking a turn or engaging in cooperative activity	7.70	5.4	3-15
refuse	Verbal refusal, turning one's back, or walking away	1.55	3.7	0-8
other	Smile, verbal comment	3.69	2.9	2-9
ignore	no response	2.00	1.1	0-4
Friendly				
friendly	Offer an object receive an offered object, vocalizing with positive tone, smiling	5.76	3.4	3-13
negative	Take object, physical aggression	3.02	2.8	0-7
ignore	No response	4.39	3.1	3-7
Agonistic				
agonistic	Resist an object take, physical aggression	9.17	6.3	1-15
friendly	smile, positive verbalization	2.12	1.9	0-5
watch	watch	1.43	.7	0-3
ignore	no response	2.67	1.8	0-6

Table 2

Preference for Same and Opposite Sex Playmates

	Mean intervals peers available		Sex of playmate[a]		
	Same	Opposite	Same	Opposite	No Preference
Age					
16-24 m.					
girls	260	173	.50 (6)	.10 (1)	.40 (5)
boys	178	256	.46 (5)	.18 (2)	.36 (4)
25-33 m.					
girls	217	217	.73 (8)	.00 (0)	.27 (3)
boys	217	217	.25 (3)	.25 (3)	.50 (6)

[a] Percentage and (n) of children with Z scores significantly higher than chance.

Table 3

Preference for Initiating to Same- and Opposite-Sex Playmates

Age	Sex of playmate[a]		
	Same	Opposite	No Preference
	Game initiations		
16-24m.			
girls	.42 (5)	.17 (2)	.42 (5)
boys	.46 (5)	.09 (1)	.46 (5)
25-33m.			
girls	.73 (8)	.09 (1)	.18 (2)
boys	.58 (7)	.17 (2)	.25 (3)
	Friendly Initiations		
16-24m.			
girls	.75 (9)	.17 (2)	.08 (1)
boys	.36 (4)	.18 (2)	.46 (5)
25-33m.			
girls	.46 (5)	.09 (1)	.46 (5)
boys	.42 (5)	.17 (2)	.42 (5)

(table continues)

Table 3 continued

Age	Sex of playmate[a]		
	Same	Opposite	No Preference
	Agonistic Initiations		
16-24m.			
girls	.33 (4)	.08 (1)	.58 (7)
boys	.82 (9)	.09 (1)	.09 (1)
25-33m.			
girls	.36 (4)	.00 (0)	.64 (7)
boys	.42 (6)	.25 (3)	.25 (3)

[a] Percentage and (n) of children significantly higher than chance

Table 4

Comparison of Response Frequency by Sex of Initiator and Partner

	Partner (Respondent)				F Values		
	Girl		Boy		Sex of initiator	Sex of partner	Sex of initiator by sex of partner
(Initiator)							
Responses	M	SD	M	SD			
Join to game initations by							
girls	7.76	.69	5.21	1.13			
boys	7.48	1.33	10.33	6.4	6.35*	.12	4.07*
Friendly to friendly initiations by							
girls	5.31	1.23	5.71	.89	1.21	1.72	2.07
boys	5.74	1.86	6.28	1.22			
Agonistic to agonistic initiations by							
girls	5.35	.98	7.41	1.08			
boys	8.25	1.29	10.31	1.15	5.86*	.19	1.85

Table 5

Preference for Engaging in Different Activities with Playmates of the Same- and Opposite-Sex

	Sex of playmate[a]		
Age	Same	Opposite	No Preference
Motor activity			
16-24m.			
girls	.25 (3)	.58 (7)	.16 (2)
boys	.27 (3)	.27 (3)	.46 (5)
25-33m.			
girls	.36 (4)	.46 (5)	.18 (2)
boys	.25 (3)	.00 (0)	.75 (9)
Manipulative/expressive activity			
16-24m.			
girls	.33 (4)	.00 (0)	.67 (8)
boys	.27 (3)	.00 (0)	.73 (8)
25-33m.			
girls	.36 (4)	.00 (0)	.64 (7)
boys	.75 (9)	.00 (0)	.25 (3)

(table continues)

Table 5 continued

Age	Sex of playmate[a] Same	Opposite	No Preference
	Dramatic play activity		
16-24m.			
girls	.33 (4)	.00 (0)	.67 (8)
boys	.00 (0)	.55 (6)	.45 (5)
25-33m.			
girls	.27 (3)	.00 (0)	.73 (8)
boys	.00 (0)	.58 (7)	.42 (5)

[a] Percentage and (n) of children with Z scores significantly higher than chance.

Table 6

Comparison of Responses within Activity Contexts

	Partner				
	Girl		Boy		Sex of initiator by sex of partner
	M	SD	M	SD	
Activity Context					
Motor					
girl	4.78	1.63	5.85	1.46	
boy	9.15	3.72	11.16	3.70	7.57**
Manipulative/ Expressive					
girl	8.19	1.72	10.41	2.25	
boy	8.46	1.91	11.01	2.57	.17
Dramatic Play					
girl	3.35	.73	3.42	1.49	
boy	2.65	1.10	2.16	1.27	.64

Table 7

Preferences for Same and Opposite Sex Friends

Age	Sex of friend[a]		
	Same	Opposite	No Preference Age
16-24m.			
girls	.42 (5)	.33 (4)	.25 (3)
boys	.18 (2)	.36 (4)	.46 (5)
25-33m.			
girls	.73 (8)	.18 (2)	.09 (1)
boys	.50 (6)	.17 (2)	.33 (4)

[a] Percentage and (n) of children with Z scores significantly higher than chance.

Table 8

Preference for Initiating to Friends of the Same and Opposite Sex

Age	n	Sex of friend[a] Same	Opposite	No Preference
		Game Initiations		
16-24m.				
girls	3	.33 (1)	.00 (0)	.66 (2)
boys	7	.43 (3)	.00 (0)	.57 (4)
25-33m.				
girls	7	.29 (2)	.00 (0)	.71 (5)
boys	7	.29 (2)	.00 (0)	.71 (5)
		Friendly Initiations		
16-24m.				
girls	3	.33 (1)	.00 (0)	.66 (2)
boys	7	.29 (2)	.00 (0)	.71 (5)
25-33m.				
girls	7	.43 (3)	.00 (0)	.57 (4)
boys	7	.00 (0)	.00 (0)	1.00 (7)

(table continues)

Table 8 continued

Age	n	Sex of friend[a] Same	Opposite	No Preference
		Agonistic Initiations		
16-24m.				
girls	3	.33 (1)	.00 (0)	.66 (2)
boy	7	.29 (2)	.00 (0)	.71 (5)
25-33m.				
girls	7	.29 (2)	.00 (0)	.71 (5)
boys	7	.00 (0)	.00 (0)	1.00 (7)

[a] Percentage and (n) of children with Z scores significantly higher than chance.